

F. W. DERBYSHIRE.
 TOOL REST FOR WATCHMAKERS' LATHES.
 APPLICATION FILED MAY 25, 1909.

936,422.

Patented Oct. 12, 1909.

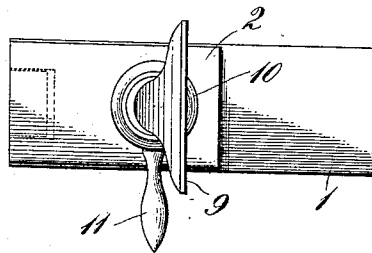


Fig. 1.

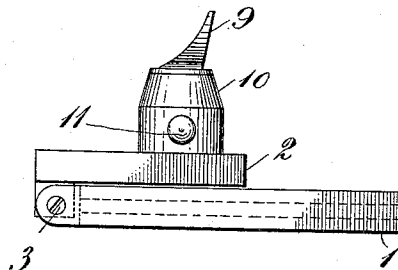


Fig. 2.

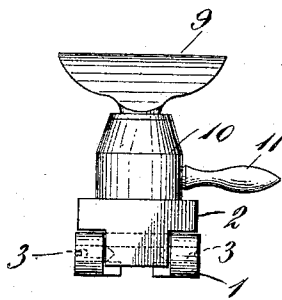


Fig. 3.

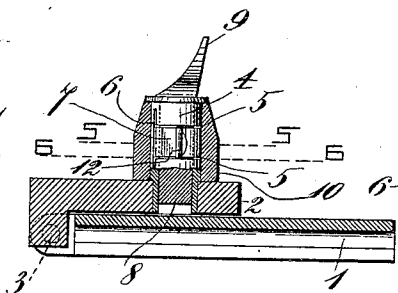


Fig. 4.

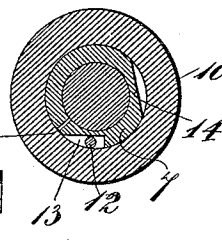


Fig. 5.

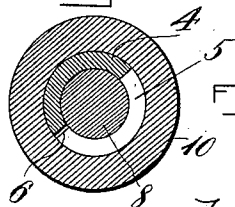


Fig. 6.

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UNITED STATES PATENT OFFICE.

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TOOL-REST FOR WATCHMAKERS' LATHES.

936,422.

Specification of Letters Patent.

Patented Oct. 12, 1909.

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To all whom it may concern:

Be it known that I, FREDERICK W. DERBYSHIRE, a citizen of the United States, and a resident of Waltham, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Tool-Rests for Watchmakers' Lathes, of which the following is a specification.

My invention relates to tool-rests for watch-makers' lathes and its object is to produce a tool-rest which may be quickly adjusted and firmly locked in position in its supporting stud in the manner hereinafter more fully set forth.

My invention will be described in connection with the drawings which accompany and form a part of this specification and which illustrate the preferred form of my invention.

In the drawings, Figure 1 is a plan view of my improved tool-rest, Fig. 2 is a side view, Fig. 3 is an end view, Fig. 4 is a longitudinal section, Fig. 5 is a cross-section taken on the line 5-5 of Fig. 4, and Fig. 6 is a cross-section taken on the line 6-6 of Fig. 4.

In the drawings 1 represents the usual sliding base provided with a tip-over 2 pivoted thereto by the screws 3 3. The tip-over is bored to receive the hollow stud 4 which is slotted transversely at 5 5 and longitudinally at 6 to provide the integral tongue 7. The post 8 of the tee 9 is arranged in the stud. The sleeve 10 provided with the actuating lever 11 surrounds the stud, and the binding roll 12 which is disposed in a longitudinal groove 13 in the stud contacts the inner wall of said sleeve. To increase the elasticity of the tongue, the wall of the stud may be reduced as shown at 14 at a point opposite the longitudinal slot 6.

It will be apparent in view of the foregoing that the sleeve may be turned to the left by means of the actuating lever 11 without binding or locking the post 8 in the stud and that when the tool-rest has been adjusted to the desired position, a very slight movement of the sleeve to the right will cause the tongue to securely bind and thereby lock the post in the stud because the bottom of said groove is inclined with re-

spect to the inner wall of the sleeve 10 as shown most clearly in Fig. 5.

One of the advantages of my invention over locking devices for tool posts heretofore employed is that the post may be locked from any position of the lever so that the latter may always be so placed as not to interfere with the operator.

It will be apparent that modifications may be made by those skilled in the art in the apparatus hereinbefore particularly described without departing from the spirit of my invention.

I claim:

1. In combination, a hollow stud provided with an integral tongue, a tool-rest arranged in said stud, a sleeve around said stud, an actuating lever secured to said sleeve, and a binding roll disposed in a longitudinal groove in said tongue and contacting with the inner wall of said sleeve, the bottom of said groove being inclined with respect to said inner wall.

2. In combination, a hollow stud slotted longitudinally and transversely to form a tongue, a tool-rest arranged in said stud, a sleeve around said stud, an actuating lever secured to said sleeve, and a binding roll disposed in a longitudinal groove in said tongue and contacting with the inner wall of said sleeve, the bottom of said groove being inclined with respect to said inner wall.

3. In combination, a hollow stud slotted longitudinally and transversely to form a tongue and having its wall reduced at a point opposite the longitudinal slot therein, a tool rest arranged in said stud, a sleeve around said stud, an actuating lever secured to said sleeve, and a binding roll disposed in a longitudinal groove in said tongue and contacting with the inner wall of said sleeve, the bottom of said groove being inclined with respect to said inner wall.

In testimony whereof, I have hereunto subscribed my name this 24th day of May, 1909.

FREDERICK W. DERBYSHIRE.

Witnesses:

E. B. TOMLINSON,
GEO. K. WOODWORTH.